

REMARKS

Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-mentioned Official Action in view of the foregoing amendments and the following remarks are respectfully requested.

Drawings

The drawings are objected to because they include reference character “8g”, which is not mentioned in the description. In response, the specification has been amended at page 40, line 19 to include this reference character.

The drawings are also objected to because in Figure 6, “(dot/mm²)” should read “--(mm²/dot)--”. In response, a Request for Approval to Amend the Drawings is being filed concurrently herewith in which reference character “(dot/mm²)” has been changed to “--(mm²/dot)--”. No new matter has been added.

It is respectfully submitted that the objections to the drawings have been overcome.

Title

The title has been objected to as not being descriptive. In response, a new title, which is more clearly indicative of the claimed invention, is presented herein for the Examiner’s consideration and approval.

Disclosure

The disclosure is objected to because of minor informalities noted by the Examiner. The specification has been amended to attend to any informalities, including those kindly identified by the Examiner. In addition, the Abstract has been amended to place such in better form. It is respectfully submitted that no new matter has been added.

Claims Status

Claims 1 through 14 remain pending in the application. Claims 1, 2, 6, and 12 have been amended to even more succinctly define the invention and/or to improve their form. It is respectfully submitted that no new matter has been added. Claim 1 is the only independent claim pending in the application.

Claim Objections

Claims 1 through 14 are objected to because of minor informalities kindly noted by the Examiner. In response, Claims 1 and 12 have been amended *inter alia* as proposed by the Examiner to overcome the objection. It is respectfully submitted that the object to the claims has been overcome.

Art Rejections

Claims 1, 5, and 8 through 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,436,714 (Suzuki) in view of U.S. Patent No. 5,138,381 (Masaki, et al.).

Claims 2, 7, 11, 13, and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Masaki, et al. as applied to Claim 1 and further in view of U.S. Patent No. 6,775,511 (Kosuge).

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Masaki, et al. as applied to Claim 1 and further in view of U.S. Patent No. 5,391,449 (Maruyama, et al.).

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Masaki, et al. as applied to Claim 1 and further in view of U.S. Patent No. 5,624,776 (Takei, et al.).

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Masaki, et al. as applied to Claim 1 and further in view of U.S. Patent No. 5,659,857 (Yamazaki, et al.).

Claim 12/1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Masaki, et al. as applied to Claim 1 and further in view of U.S. Patent No. 5,625,443 (Ohta, et al.).

Claim 12/11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Masaki, et al. and Kosuge as applied to Claims 11 and further in view of Ohta, et al.

The rationale underlying each of the foregoing rejections is succinctly set forth in the Official Action.

Response to Art Rejections

The rejections are respectfully traversed.

Amended Claim 1 calls for an electrophotographic apparatus that includes a photosensitive member, which comprises a surface layer formed on a surface thereof and a photosensitive layer. A sum of a thickness of the photosensitive layer and a thickness of the surface layer is 25 μm or lower. An exposing means exposes the photosensitive member in accordance with a digital image signal in order to form an electrostatic image of 400 dpi or higher on the photosensitive member. A developing means forms a developer image on the photosensitive member by developing the electrostatic image by a developer. A cleaning means cleans a residual developer from the photosensitive member after the developer image is transferred to an image receiving member, which includes a cleaning brush brought into contact with the photosensitive member.

To obtain an image having a high-resolution, such as 400 dpi or higher, a ratio of a film thickness of a photosensitive layer of a photosensitive member to a resolution of an image to be recorded must be increased. For such a purpose a sum of a film thicknesses of the photoconductive layer (photosensitive layer) and a thickness of the surface (protective) layer is 25 μm or lower. However, an electrostatic force between a developer and the photosensitive member becomes greater, thereby causing a failure in cleaning residual developer.

In order to prevent such a cleaning failure, the claimed invention also calls for (1) a resolution of the electrostatic image being 400 dpi or higher as above-noted; and also calls for (2) $D \times S \geq 0.06$ and $D \geq 200$ being satisfied, where a brush density of the cleaning brush is D (number/ mm^2) and an area of a pixel of the electrostatic image is S (mm^2/dot).

According to the claimed invention, a high resolution image can be obtained in a manner compatible with an increase in cleaning performance.

Suzuki discloses an LED array 8, of 240 dpi and an LED array 8s of 300 dpi. Suzuki does not disclose forming an electrostatic image of 400 dpi or higher. Suzuki also discloses that fibers are implanted in a brush having a density of 11,220 fibers/ inch^2 . Suzuki does not disclose or suggest the claimed brush density D and pixel area S relationships.

The Examiner recognizes that Suzuki does not disclose the claimed layers of the photosensitive member. Accordingly, the Examiner relies on Masaki, et al. for overcoming the deficiencies of Suzuki, et al. in this regard.

In Masaki, et al., a thickness of a photosensitive member is 10 to 40 μm and a thickness of a surface protective layer is 0.01 to 5 μm . Accordingly, the sum of the

thicknesses of the two layers is outside of the claimed sum. Moreover, Masaki, et al. does not remedy the above-noted deficiencies of Suzuki *vis-à-vis* amended Claim 1.

It is respectfully submitted that neither Suzuki nor Masaki, et al. discloses or suggests that the resolution of the electrostatic image is 400 dpi or higher and do not disclose the D and S relationships as recited in amended Claim 1.

It is also respectfully submitted that the combination rejections are not well founded. The Examiner has provided a *rationalization* for combining the teachings of the cited art based on the benefits of doing so. A combination rejection is proper only when there is some suggestion or motivation in the cited art *per se* to cause one having ordinary skill in the art to combine the teachings of the cited art. There is nothing in the cited art which supports the position that it can be combined in the manner suggested. Even if the art could be so combined, the mere fact that the art can be combined is not sufficient if there is no suggestions in the art that such a combination is desirable. For example, see ACS Hospital Systems, Inc. v. Montefiore Hospital, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

Accordingly, the claimed invention is neither anticipated nor rendered obvious over the cited art, whether taken individually or in combination.

Kosuge, Maruyama, et al., Takei, et al., Yamazaki, et al., and Ohta, et al. are cited for allegedly showing details recited in certain dependent claims. It is respectfully submitted that these additional citations do not remedy the above-noted deficiencies of Suzuki and Masaki, et al. whether taken individually or in combination.

In view of the foregoing, it is respectfully submitted that independent Claim 1 is allowable over the cited art whether taken individually or in combination.

Dependent Claims

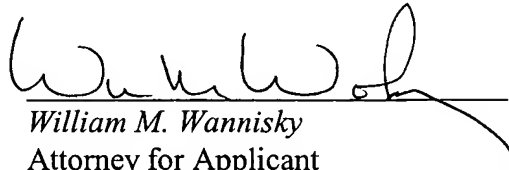
Claims 2 through 14 depend either directly or indirectly from Claim 1 and are allowable by virtue of their dependency and in their own right for further defining Applicant's invention. Individual consideration of the dependent claims is respectfully requested.

Closing Comments

It is respectfully submitted that the claims on file are allowable over the art of record and that the application is in condition for allowance. Favorable reconsideration and early passage to issue of the present application are earnestly solicited.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our New York office at the address shown below.

Respectfully submitted,


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